

AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings include changes to Figs. 1, 2 and 13. These sheets replace the original sheets. In Figure 1, the previously omitted reference sign “37” has been added. In Figure 2, the label “Third Party LAN” has been added to the box “75” and the previously included reference characters “90” and “95” have been deleted. In Figure 13, the previous reference sign “350” has been replaced with the reference sign “330”.

Attachments: 3 Replacement Sheets

REMARKS

In the specification, several paragraphs have been amended to correct minor editorial matters. Figures 1, 2 and 13 have been amended as explained above and the replacement drawing sheets are attached herein. Claims 1-20 are pending in the application.

Rejections under 35 U.S.C. §103(a)

Applicant respectfully traverses the Examiner's rejection of claims 1-5 and 7-20 under 35 U.S.C. §103(a) as being unpatentable by U.S. Patent No. 6,538,577 to Ehrke (hereinafter referred to as "Ehrke") in view of U.S. Patent No. 6,622,097 to Hunter (hereinafter referred to as "Hunter").

1. Rejection of Claims 1-11:

An example of Applicants' invention as claimed is disclosed in Figs. 1 and 2 and paragraphs 42-44 of Applicants' Published Application 2004/0034484. The Applicant particularly claims a utility consumption control network 1 for controlling consumption of units of a resource provided by a utility. A communications network 55 is accessible by the utility. A gateway 10 is connected to the communications network 55 and includes at least one application transmitting and receiving data through the control network 1, processing the data and providing the data to a user interface of the gateway 10. A device 85 (such as lights, heating units or other appliances) is in communication with the control network 1 and consuming units of the resource provided by the utility. An adapter 65 is in communication with the device 85 and translates data sent to and from the device 85 on the communications network 55 into a protocol for communication with the gateway 10.

The Examiner alleges that “Ehrke discloses an electronic electric meter for networked meter reading comprising a communication network accessible by a utility (column 6, lines 38-39), a gateway connecting to the communications network (column 6, lines 40-41), including a microcontroller, inherently with an operating system, (column 10, lines 1-5) at least one application transmitting (column 10, lines 50-52), receiving (column 10, lines 38-39), and processing (column 10, lines 44-49) data through a utility consumption network (column 9, lines 25-29).”

Applicants respectfully submit that the Examiner has misconstrued the cited portions of Ehrke which merely disclose an electric meter (Figs. 5 and 6) that communicates over a LAN to a node or so-called “gateway.” The node merely transmits usage data from the meter to a utility over a WAN.

“The gateway node 72 is field programmable to meet a variety of data reporting needs and monitors the electric meter 10 to determine the presence of data. Some additional handshaking hardware may be required to sense the presence of a spread spectrum signal. An alarm message is sent automatically by electric meter in the event of a tamper or alarm condition, such as a power outage...Gateway node 72 must know how many bytes of data it is expecting to see and count them as they come in. When the proper number of bytes is received, reception is deemed complete and the message is processed. Any deviation from the anticipated number of received bytes may be assumed to be an erroneous message...

During the transmit mode of gateway node 72, initialization microcontroller 98 [Fig. 7] monitors the data line to detect idle conditions, start bits, and stop bits...microcontroller 98 controls all node functions including programming spread spectrum processor 102, RF channel selection in frequency synthesizer 104 of RF transceiver 94, transmit/receive switching, and detecting failures in WAN interface module 96.”

However, even as construed by the Examiner, Applicants submit that the above-quoted portions of Ehrke do not teach or suggest, among other things “a communications network accessible by the utility; a gateway connecting to the communications network, including an

operating system.” There is no teaching or suggestion of a “user interface; at least one application transmitting and receiving data through the utility consumption control network, processing the data and providing the data to the user interface [and] a user interface control mechanism selecting portions of the user interface” as particularly disclosed and claimed by Applicants.

The Examiner further alleges that Ehrke discloses “a device in communication with the utility consumption network, the device consuming units of the resource provided by the utility (column 5, lines 26-34), and an adapter in communication with the device translating data sent to and from the device on the communications network into a protocol for communication with the gateway (column 38-46) [sic].”

Applicants submit that the Examiner has misconstrued the cited portions of Ehrke which merely describe circuitry of the electric meter (in Fig. 3). The cited portions of Ehrke state that:

“ROM 59 contains customer specific and site specific variables that may be important for calculating electricity usage. The meter 10 has an accuracy of approximately 0.2% for a power input current range of 0-200 amps. Other features that the measurement microcontroller 54 is able to measure are kilowatt hour usage, voltage and frequency measurements, energy direction, time and date reporting, load profiling and failure reporting...

Electric meter 10 is able to communicate commodity utilization data and power quality information to a utility over a local area network (LAN) or a wide area network (WAN). A radio frequency (RF) communication section within the electric meter 10 is comprised by a communication microcontroller and a spread spectrum processor chip 58 and an RF transceiver 60. An antenna 62 is coupled to the RF transceiver 60 for transmitting and receiving RF spread spectrum signals.”

However, even as construed by the Examiner, Applicants submit that the above-quoted portion of Ehrke does not teach or suggest “a device in communication with the utility

consumption control network, the device consuming units of the resource provided by the utility:" as in Claim 1. And Ehrke nowhere discloses a combination including "an adapter in communication with the device, translating data sent to and from the device on the communications network into a protocol for communication with the gateway" as particularly disclosed and claimed by Applicants.

The Examiner further alleges that Hunter teaches an "apparatus for reading and controlling electric power consumption comprising a gateway control device that is portable (column 5, lines 17-23 and column 7, lines 30-35), includes a graphical user interface (column 6, lines 50-64) and a user interface control mechanism for selecting portions of the user interface (i.e. mouse pointer) (Figure 6 and column 7, lines 30-35) in order to initiate a state change of the operational resource consuming device (column 7, lines 56-63) for cost efficiency (column 8, lines 18-26)."

Applicants respectfully submit that the Examiner has misconstrued the cited portions of Hunter which merely describe a computer with a user interface (Figs. 6, 7 and 8) and connected to power consuming devices. The computer is networked to allow a utility company to obtain data for billing purposes or an end-user to control his power consumption from his PDA or other remote location. The user interface indicates what devices are being currently used and the rate of power consumption, and allows the user to control these devices. The interface also provides a usage forecast and the user may remotely control the computer to turn off unnecessary lights, or decrease the length of time certain devices will run.

Applicants respectfully submit that the cited portions of Hunter, however, fail to teach or

suggest “a communications network accessible by the utility; a gateway connecting to the communications network, including, an operating system; a user interface; at least one application transmitting and receiving data through the utility consumption control network, processing the data and providing the data to the user interface; a user interface control mechanism selecting portions of the user interface” as particularly claimed. Again, there is no teaching or suggestion of “a device in communication with the utility consumption control network, the device consuming units of the resource provided by the utility” in combination with “an adapter in communication with the device, translating data sent to and from the device on the communications network into a protocol for communication with the gateway” as Applicants particularly disclose and claim.

From the foregoing, it is clear that neither Ehrke nor Hunter alone or in combination disclose or suggest each and every element of Claim 1. Consequently, the Examiner has not made a prima facie case of obviousness. Accordingly, the rejection of Claim 1 and Claims 2-11 ultimately depending therefrom under 35 U.S.C. 103(a) is improper and should be withdrawn.

2. Rejection of Claims 12-16:

An example of Applicants’ claimed method is disclosed in Fig. 2 and paragraphs 42-44 of Applicants’ Published Application 2004/0034484. The method includes receiving a demand-response event request over a WAN 37 from the utility to a gateway 10 in communication with a local network 55. The demand response event may be, for example, a state change for an operational resource consuming device(s) 85 (such as lights, heating devices or other appliances). The request is forwarded through the local network 55 to a translator 65 which

translates the request into a native format for the device 85. The method further includes receiving and storing post-demand response event data from the device 85 and forwarding the data through the WAN 37 to the utility, the utility analyzing the data to maximize efficiency and cost savings by adjusting output of the resource.

The Examiner alleges that Ehrke discloses “a method for managing a network comprising receiving a demand-response event requested over a wide area network from the utility to a gateway (column 7, lines 1-8) in communication with a local network (column 7, lines 9-20), forwarding the demand-response event request through the local network to a translator for the operational resource consuming device (column 7, lines 9-20), translating the request into a native format for the operational resource consuming device (column 7, lines 15-20).”

Applicants submit that the Examiner has again misconstrued the cited portions of Ehrke which merely describe a communication episode (in Fig. 8) wherein the utility 76 requests data from the electric meter 10 by sending a data stream over a WAN. The WAN handler 84 of the gateway node 72 receives the WAN data stream, creates a WAN message and routes the WAN message to the message dispatcher 80. The message dispatcher 80 then verifies the meter ID from the data stores 86, creates an RF message for routing to the RF handler 82. The RF handler 82 converts the RF message to an RF data stream for sending to the electric meter 10 over the LAN and waits for a response.

However, even as construed by the Examiner, Applicants respectfully submit that the above-mentioned portion of Ehrke does not teach or suggest “receiving a demand-response event request over a wide area network from the utility to a gateway in communication with a local

network” and “forwarding the demand-response event request through the local network to a translator for the operational resource consuming device” as particularly claimed. There is no teaching or suggestion of “translating the request into a native format for the operational resource consuming device” as Applicants specifically claim in Claim 12.

The Examiner further alleges that Ehrke discloses “receiving and storing post demand-response event data from the operational resource consuming device (column 7, lines 20-22 and 56-57 and column 9, lines 30-38), and forwarding the post demand-response event data through the wide area network to the utility (column 7, lines 25-33), the utility analyzing the post demand-response event data (column 1, lines 21-23 and column 9, lines 30-38).”

Applicants respectfully submit that the Examiner has misconstrued the cited portions of Ehrke which further describe the above noted episode (Fig. 8) wherein the meter sends an RF data stream over the LAN to the RF handler. The RF handler creates an RF message for routing to the message dispatcher. The dispatcher determines the target response from the data stores and creates a WAN message for routing to the WAN handler. The WAN handler converts the WAN message to a WAN data stream for sending to the utility over the WAN. The cited portions of Ehrke state further that,

“The gateway node 72 [Figs. 5 and 6] receives data requests from the utility, interrogates the meter and forwards commodity usage information, as well as power quality information, over the WAN 78 to the utility 76. The gateway node 72 exchanges data with certain, predetermined, meters for which it is responsible, and "listens" for signals from those meters. The gateway node 72 does not store data for extended periods, thus minimizing security risks. The gateway node's RF communication range is typically one mile.”

Applicants submit that the above quoted portions of Ehrke do not teach or suggest “receiving and storing post-demand response event data from the operational resource consuming device” and “forwarding the post demand-response event data through the wide area network to the utility” as particularly claimed by Applicants. Again, there is no mention of “the utility analyzing the post demand-response event data to maximize efficiency and cost savings by adjusting output of the resource” as Applicants claim in claim 12.

The Examiner further alleges that Hunter teaches a method “for reading and controlling electric power consumption comprising a gateway control device that is portable (column 5, lines 17-23 and column 7, lines 30-35), includes a graphical user interface (column 6, lines 50-64) and a user interface control mechanism for selecting portions of the user interface (i.e. mouse pointer) (Figure 6 and column 7, lines 30-35) in order to initiate a state change of the operational resource consuming device (column 7, lines 56-63) for cost efficiency (column 8, lines 18-26).”

Hunter merely discloses a network for remote controlling appliances such as lights, etc. (Figs. 6, 7 and 8). Applicants submit that the cited portions of Hunter, however, fail to teach or suggest “receiving a demand-response event request over a wide area network from the utility to a gateway in communication with a local network” and “forwarding the demand-response event request through the local network to a translator for the operational resource consuming device” as particularly claimed. There is no teaching or suggestion of “translating the request into a native format for the operational resource consuming device” as Applicants specifically claim in Claim 12. Hunter fails to disclose “receiving and storing post-demand response event data from the operational resource consuming device” and “forwarding the post demand-response event data through the wide area network to the utility.” Furthermore, there is no teaching in Hunter of

“the utility analyzing the post demand-response event data to maximize efficiency and cost savings by adjusting output of the resource“ as claimed in Claim 12.

From the foregoing, it is clear that neither Ehrke nor Hunter alone or in combination disclose or suggest each and every element of Claim 12. Consequently, the Examiner has not made a prima facie case of obviousness. Consequently, the rejection of Claim 12 and Claims 13-16 dependent therefrom under 35 U.S.C. 103(a) is improper and should be withdrawn.

3. Rejection of Claim 17

The Examiner did not specify whether or which portions of Ehrke or Hunter are relied upon in rejecting Claim 17. However, Claim 17 contains limitations similar to those in Claims 1 and 12, and Applicants therefore submit that Claim 17 is patentable over the cited references for reasons previously described. In particular, Applicants submit that Ehrke and Hunter fail to teach or suggest “at least one operational resource consuming device” and a “gateway having application means for controlling the operational resource consuming device” as particularly claimed in Claim 17. There is no teaching or suggestion of “networking means for connecting the resource consuming device to the gateway for transmitting and receiving operational data,” “translation means for translating the operational data into a protocol for communication with the gateway” and “means for communicating a demand-response event request over a wide area network to the gateway,” as Applicants particularly claim.

Again, Ehrke and Hunter disclose system inapposite Applicants’ claimed invention. Ehrke merely disclose an electric meter that communicates over a network to a node which transmits usage data from the meter to a utility over another network. Hunter discloses merely a networked computer having devices connected thereto and controlled remotely.

Accordingly, neither Ehrke nor Hunter alone or in combination disclose or suggest each and every element of Claim 17. Consequently, the Examiner has not made a prima facie case of obviousness. Therefore, the rejection of Claim 17 and Claims 18-20 dependent therefrom under 35 U.S.C. 103(a) is improper and should be withdrawn.

4. Rejection of Claim 6

Applicants traverse the Examiner's rejection of claim 6 under 35 U.S.C. §103(a) as being unpatentable over Ehrke and Hunter in view of U.S. Patent No. 5,696,695 to Ehlers.

The Examiner in his rejection states that "the invention of Ehrke and Hunter teaches many of the features of the claimed invention and while the combination does teach providing a graphical user interface for control of a consumption device, the combination does not specifically provide a menu and button driven interface." Thus, Ehlers is relied on only for its disclosure related to a menu and button driven interface. Claim 6 depends ultimately from Claim 1. Applicants submit that because Claim 1 is patentable over either Ehrke and Hunter taken alone or together as explained above, therefore Claim 6 is patentable over the proposed combination of Ehrke, Hunter and Ehlers.

CONCLUSION

In view of the above, reconsideration and allowance of this application as amended are now believed to be in order, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below. The Examiner is invited and encouraged to telephone the undersigned with any concerns in furtherance of the prosecution of the present application.

Please charge any fee(s) that may be associated with this Response to Deposit Account No. 50-0369.

Respectfully submitted,



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1/11

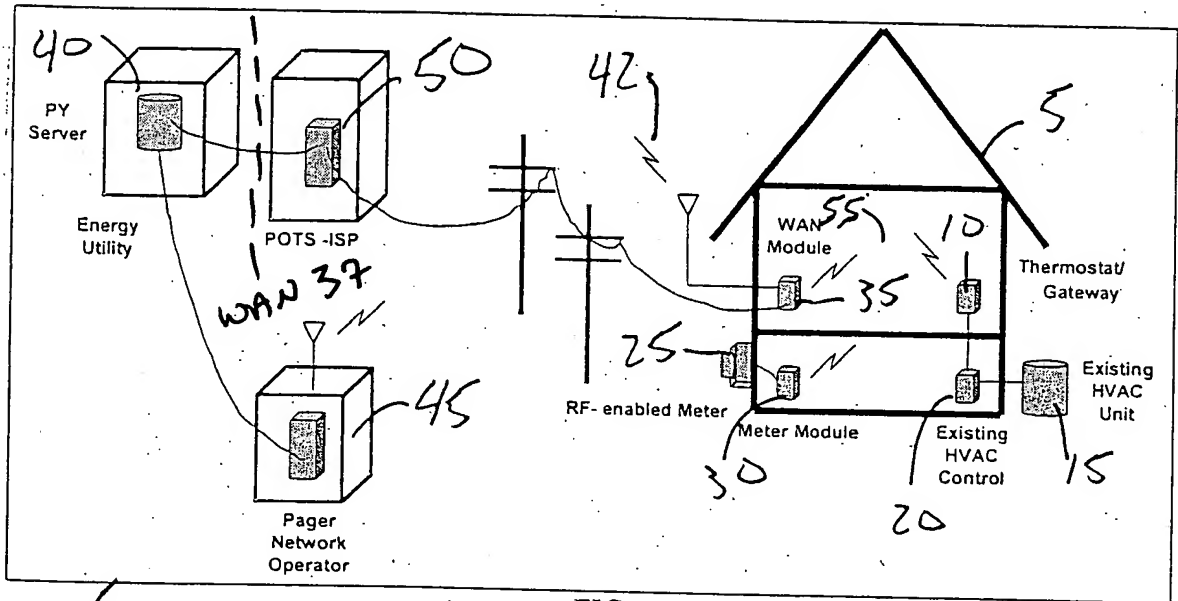


FIG. 1

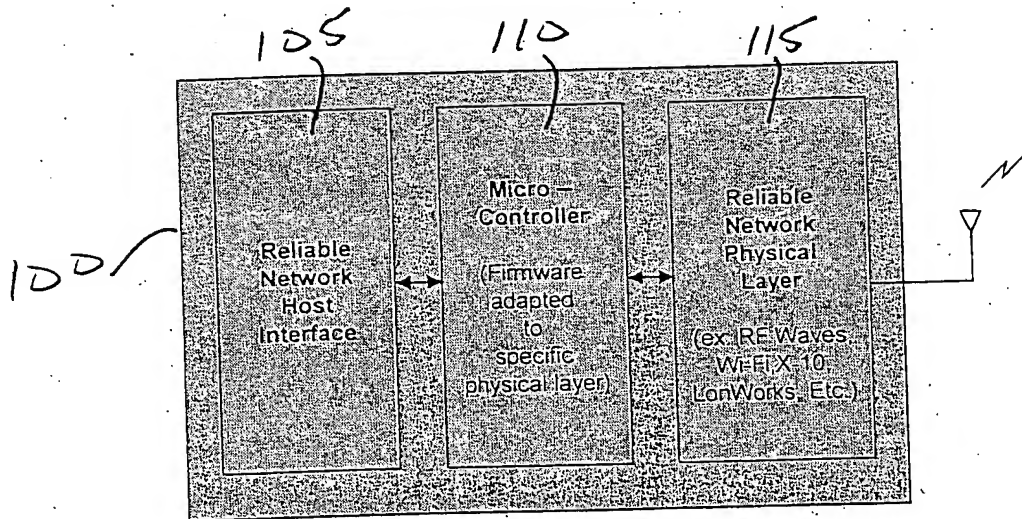


FIG. 3

2/11

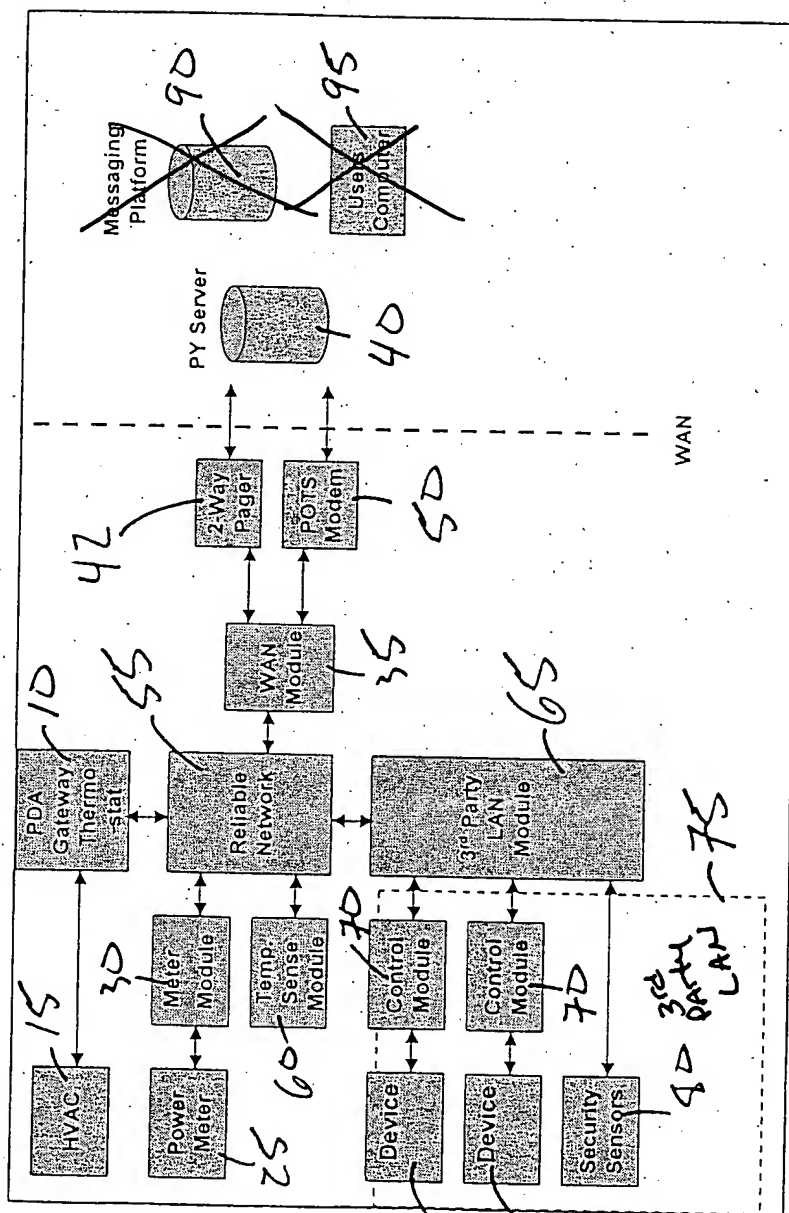


FIG. 2

11/11

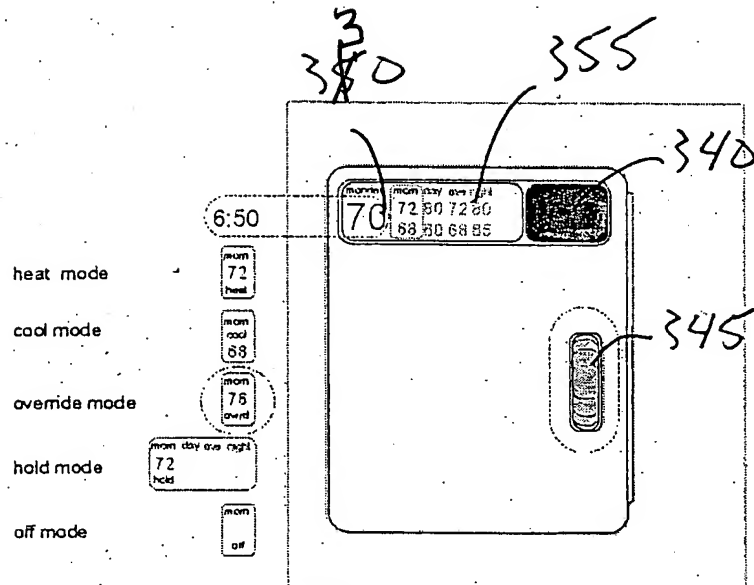


FIG. 13

